



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0432; Project Identifier 2013-SW-074-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters (Type Certificate Previously Held by Eurocopter France) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Airbus Helicopters (Type Certificate previously held by Eurocopter France) Model AS350B3 and EC130T2 helicopters. This proposed AD was prompted by a report of failure of an engine digital electronic control unit (DECU). This proposed AD would require revising the existing Rotorcraft Flight Manual (RFM) for your helicopter. This proposed AD would also allow the option of modifying the electronic engine control unit (EECU) as terminating action for the RFM revision. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For Airbus Helicopters service information identified in this NPRM, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. For Safran Turbomeca service information identified in this NPRM, contact Safran Helicopter Engines, S.A., 64511 Bordes, France; phone: +33 (0) 5 59 74 45 11. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0432; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, the EASA safety information bulletin (SIB), any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Jon Jordan, Rotorcraft Flight Test Pilot, Southwest Section, Flight Test Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email jon.jordan@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2017-0432; Project Identifier 2013-SW-074-AD” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Jon Jordan, Rotorcraft Flight Test Pilot, Southwest Section, Flight Test Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email

jon.jordan@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2013-0287, dated December 5, 2013 (EASA AD 2013-0287), to correct an unsafe condition for Eurocopter (formerly Eurocopter France, Aerospatiale) Model AS 350 B3 and EC 130 T2 helicopters with an ARRIEL 2D engine and THALES full authority digital engine control (FADEC) part number (P/N) C13165DA00 or P/N C13165FA00 installed. The EASA advises of a report of an in-flight event where the pilot noticed that the temporary amber governor (GOV) light had illuminated, followed by the failure of the vehicle engine monitoring display (VEMD) screens, and no availability of the automatic or auxiliary engine back-up control ancillary unit (EBCAU). Subsequent investigation identified an internal failure of the engine DECU, which led to loss of fuel flow regulation (frozen fuel metering unit). This failure was not indicated to the pilot by a red GOV warning light as expected, but with amber GOV indication and loss of VEMD display instead. EASA also advises that if this fuel metering unit is frozen in the open position, it may lead to a rotor overspeed, and if it is frozen in the closed position, it may lead to unavailability of engine power. EASA states that this condition, if not addressed, could result in the pilot identifying the type of failure condition incorrectly, possibly resulting in an improper response.

Accordingly, and pending the development of a DECU assembly design improvement, the EASA AD requires incorporating a new procedure into the Emergency Procedures section of the RFM and informing all flight crews of the RFM change. EASA considers its AD an interim action and states that further AD action may follow.

After EASA issued EASA AD 2013-0287, EASA issued SIB No. 2013-23, dated December 19, 2013, for Eurocopter AS 350 B3 and EC 130 T2 helicopters with a

Turboméca ARRIEL 2D engine installed. The SIB recommends modifying certain EECUs.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that the unsafe condition described previously is likely to exist or develop on other helicopters of the same type designs.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. AS350-01.00.67 and ASB No. EC130-04A004, each Revision 2 and dated February 17, 2014 (ASB AS350-01.00.67 and ASB EC130-04A004). ASB AS350-01.00.67 applies to Model AS350B3 helicopters and ASB EC130-04A004 applies to Model EC130T2 helicopters. This service information provides a new RFM procedure in the event of illumination of the amber GOV followed by the loss of the VEMD display.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA reviewed Safran Turbomeca Mandatory Service Bulletin No. 292 73 2852, Revision B, dated February 12, 2014. This service information specifies replacing certain FADEC D EECUs with certain amended FADEC D EECUs.

Proposed AD Requirements in this NPRM

This proposed AD would require revising the Emergency Procedures of the existing RFM for your helicopter by inserting Appendix 4. of ASB AS350-01.00.67 or

ASB EC130-04A004, or a different document with information identical to that in Appendix 4., as applicable to your helicopter model.

As an optional terminating action for the RFM revision, this proposed AD would allow installing amendment A on FADEC P/N C13165DA00 or amendment B on FADEC P/N C13165FA00.

Differences between this Proposed AD and the EASA AD

The EASA AD applies to Model AS350B3 and EC130T2 helicopters, with an ARRIEL 2D engine and THALES FADEC P/N C13165DA00 or P/N C13165FA00 installed, whereas this proposed AD would apply to those helicopters except not those with THALES FADEC P/N C13165DA00 with amendment A or P/N C13165FA00 with amendment B installed. This proposed AD would also allow installing those amendments on the FADEC as an optional termination action, whereas the EASA AD does not.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect up to 628 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this proposed AD.

Revising the existing RFM for your helicopter would take about 0.25 work-hour for an estimated cost of \$21 per helicopter and up to \$13,188 for the U.S. fleet.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

Airbus Helicopters (Type Certificate Previously Held by Eurocopter France):

Docket No. FAA-2017-0432; Project Identifier 2013-SW-074-AD.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters (Type Certificate previously held by Eurocopter France) Model AS350B3 and EC130T2 helicopters, certificated in any category, with an ARRIEL 2D engine and THALES full authority digital engine control (FADEC) part number (P/N) C13165DA00 without amendment A or P/N C13165FA00 without amendment B, installed.

Note 1 to paragraph (c): Helicopters with an AS350B3e designation are Model AS350B3 helicopters.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 7321, Engine Fuel Control/Turbine Engines.

(e) Unsafe Condition

This AD was prompted by a report of failure of an engine digital electronic control unit. The FAA is issuing this AD to prevent incorrect indicator illumination, display failure, and loss of fuel flow regulation (frozen fuel metering unit). The unsafe condition, if not addressed, could result in misleading information to the pilot, rotor overspeed or unavailability of engine power, and subsequent loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 25 hours time-in-service after the effective date of this AD, revise the Emergency Procedures of the existing Rotorcraft Flight Manual (RFM) for your helicopter by inserting Appendix 4. of Airbus Helicopters Alert Service Bulletin (ASB) No. AS350-01.00.67 or ASB No. EC130-04A004, each Revision 2 and dated February 17, 2014 (ASB AS350-01.00.67 or ASB EC130-04A004), as applicable to your helicopter model. Inserting a different document with information identical to that in Appendix 4. of ASB AS350-01.00.67 or ASB EC130-04A004, as applicable to your helicopter model, is acceptable for compliance with the requirement of this paragraph.

(2) As an optional terminating action for the requirement of paragraph (g)(1) of this AD, install amendment A on FADEC P/N C13165DA00 or amendment B on FADEC P/N C13165FA00.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (i)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Jon Jordan, Rotorcraft Flight Test Pilot, Southwest Section, Flight Test Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email jon.jordan@faa.gov.

(2) For Airbus Helicopters service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. For Safran Turbomeca service information identified in this NPRM, contact Safran Helicopter Engines, S.A., 64511 Bordes, France; phone: +33 (0) 5 59 74 45 11. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(3) The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2013-0287, dated December 5, 2013. You may view the EASA AD on the Internet at <https://www.regulations.gov> in the AD Docket.

Issued on March 5, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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